



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/681,212 | 10/09/2003 | Shigenori Watari | NIP-217-02 | 8332 |
| 24956 7590 07/20/2010 MATTINGLY & MALUR, P.C. 1800 DIAGONAL ROAD SUITE 370 ALEXANDRIA, VA 22314 | | | | |
| EXAMINER | | | | |
| GORDON, BRIAN R | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 1797 | | | | |
| MAIL DATE | | DELIVERY MODE | | |
| 07/20/2010 | | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/681,212

Applicant(s)

WATARI ET AL.

Examiner

Brian R. Gordon

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2010.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-15 and 17 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 7-11 and 17 is/are rejected.
7) ☐ Claim(s) 8-10 and 12-15 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/789,625.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 29, 2010 has been entered.

Response to Arguments

1. Applicant's arguments filed March 29, 2010 have been fully considered but they are not persuasive.

As to the 112, first paragraph enablement rejection, the examiner hereby withdraws the rejection. Based upon applicant's response, it should be noted that applicant appears to be attempting to cross-claim multiple embodiments disclosed within the specification. It should be noted that claims 7 and 17 only cover the embodiment of Figure 8. As confirmed by applicant the plurality of lateral piezoelectric elements 35 are considered the first means for generating. As illustrated in Figure 3, the same element 35 (first means) generates a lateral beam that is not irradiated from the bottom of the container. In such embodiment, there is no separate second means for generating a lower acoustic wave which is irradiated from the bottom as claimed. The plurality of lateral piezoelectric elements cannot be considered both the first means and

Art Unit: 1797

second means which appears to be what applicant is attempting claim with the content of claim 11. As such claim 11, is unclear and directed to new matter.

2. Applicant's arguments filed February 26, 21010 have been fully considered but they are not persuasive. Claim 11 is directed to new matter that is not supported by the instant applicant or either of the previous foreign priority applications.

As to JP 2000-54955, applicant does not argue that the application provides support that of claim 7. Instead applicant changed the dependency of all claims which previously depended upon claim 7 to that of new claim 17.

As such, the previous art rejection based upon Akira of claims 8-11 and 12-15 are hereby withdrawn.

Applicant asserts that claim 7 should receive credit for the date of JP 2000-50034. However, as previously stated the JP application has a different inventors from that of the instant application. MPEP 201.15 states

The foreign application may have been filed by and in the name of the assignee or legal representative or agent of the inventor, as applicant. In such cases, if the certified copy of the foreign application corresponds with the one identified in the oath or declaration as required by 37 CFR 1.63 and no discrepancies appear, it may be assumed that the inventors are entitled to the claim for priority. If there is disagreement as to inventors on the certified copy, the priority date should be refused until the inconsistency or disagreement is resolved.

In the instant case, there is a disagreement as to the inventors of the instant invention of claim 7 and that of JP 2000-50034. As such, the priority date is refused.

As such, the rejection of claim 7 is hereby maintained.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 11 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a first means including a plurality of generators (plurality of piezoelectric elements 35) that are vertically aligned along a length of the vessel, wherein the first means is capable of being activated to generate a lateral wave according to the liquid level in the vessel and second means (lower piezoelectric element 37) under the bottom of the reaction vessel for generating a lower acoustic wave, does not reasonably provide for an angular moveable reflecting acoustic wave reflecting means being present within a device at the same time when a second means is present. In the embodiments in which the reflecting means is provided under the bottom of the reaction vessel no second means (lower piezoelectric element 37) is included therein and vice versa. As illustrated by the figures, the reflecting means and lower piezoelectric element 37 are both located underneath the bottom of the reaction vessel, in the respective embodiments. As such, both elements do not exist within a single embodiment. In the instance the embodiments, in which a reflecting means is included no acoustic wave is irradiated from the bottom. Actually, a lateral wave irradiated by the bottom most generator of the plurality of the first means is transmitted to the reflecting means (located under the reaction vessel) and the lateral wave is reflected from the bottom of the vessel upward towards the surface level of the liquid so as to raise a part of said liquid level by an acoustic radiation pressure of said reflected acoustic wave. The specification does not enable any person skilled in the art to which

it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims.

5. Claim 17 is rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The liquid including a specimen and reagent is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). As presently drafted the liquid is not positively claimed as being required as being present in the container. However, the entire operation of the analyzer depends on the liquid being present and the properties thereof. As such, the claim should read as "a reaction vessel ~~for~~ containing a liquid that ~~which~~ includes said specimen..." Such, requirement was previously discussed and agreed upon as indicated by the record (see Interview Summary 9/30/09 and Applicant's response/amendment – 10/9/09). It should be noted that amending the claim to positively claim the liquid would make claims 17 and 7 essentially duplicate claims. As such, new claim 17 should be cancelled from the application.

6. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear how the device can include a second means (37) that irradiates a lower wave from the bottom and also a reflecting means that reflects the same lower wave that originates from the second means underneath the reaction vessel.

Claim Rejections - 35 USC § 102

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
8. Claim 7 is rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over by Akira JP2000338113.

Akira discloses a structurally equivalent chemical analyzer including a pair of side array sound sources 205 and a pair of sound receiving elements 207 respectively opposite to one another are operated to measure the transmission of partial acoustic wave of the reaction vessel 102 at the position. This measurement is executed on each pair, a transmission amount of acoustic wave at each position is measured, and a position of the maximum difference in the transmission amount is regarded as a position of a liquid surface 209. When the acoustic wave of polarized intensity is applied from a lower sound source 206 to a sound source side, and the liquid surface 209 is pressed up to a reaction vessel 102 side surface, the liquid surface 209 is lowered at a side surface at the opposite side. This is determined by the surface tension, concentration, hydrophilic property to a vessel wall and the like of an object to be stirred, and the characteristics can be identified on the basis of the intensity of the applied acoustic wave and the polarization of the liquid surface 209. This detection is executed not only before the stirring but also similarly executed after the stirring to be compared, and the achievement in stirring and mixing can be evaluated.

Allowable Subject Matter

9. Claims 8-10, 12-15, and 17 would be allowable if is rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, set forth in this Office action and cancellation of claim 7 (to avoid duplicate claim rejection).
10. The following is a statement of reasons for the indication of allowable subject matter: Akira is not prior art based upon the foreign application JP 2000-50034.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, 1st Fri. Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 1797

/Brian R Gordon/
Primary Examiner
Art Unit 1797